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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ENGLE, PATRICIA LYNN

ART UNIT	PAPER NUMBER
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3612

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,758

Applicant(s)

BELANGER ET AL.

Examiner

Patricia L Engle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Drawings***

1. The drawings are objected to because the new drawing sheets (which overcome the previous objection) do not include the label "Replacement Sheet". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 9-12, 15 and 28-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Denoual et al. (US Patent 6,129,132).

Regarding claim 1, Denoual et al. disclose a door (column 1, line 5) for use with a vehicle (column 1, line 8), the vehicle defining a load space (not shown) and having an access opening (not shown) communicating between the load space and atmosphere, the door comprising: a first panel (3) having an end (3b), the end (3b) having an arm (3b2) and a protuberance (3b3) connected to the arm (3b2), together the end (3b, especially 3b1), the arm (3b2), and the protuberance (3b3) defining an arcuately shaped recess (3b5); and a second panel (3) having a hook (3a3), the hook being engageable (Fig. 3A) in the arcuately shaped recess (3b5) to pivotably connect the first panel (3) and the second panel (3), the hook (3a3) having an arcuate shape corresponding to the arcuately shaped recess.

Regarding claim 2, Denoual et al. disclose the door of claim 1, wherein the first panel has a first face and the second panel has a second face, and wherein the second panel is pivotable relative to the first panel between a first orientation (Fig. 3B), in which the second face is substantially perpendicular to the first face, and a second orientation (Fig. 3A), in which the second face is substantially parallel to the first face.

Regarding claim 3, Denoual et al. disclose the door of claim 2, wherein the second panel (3) is fixedly connected to the first panel (3) when the second panel is in the second orientation (Fig. 3A) and wherein the second panel (3) is removeably connected to the first panel when the second panel is in the first orientation (Fig. 1A).

Regarding claim 4, Denoual et al. disclose the door of claim 2, wherein the vehicle includes tracks (column 1, lines 6-7) positioned adjacent to the access opening, and wherein the tracks limit movement (inherent) of the second panel between the first orientation and the second orientation.

Regarding claim 6, Denoual et al. disclose the door of claim 1, wherein the first panel and the second panel define an air channel between the load space and the atmosphere, the hook (3a3) matingly engaging the protuberance (3b3), and together, the protuberance and the hook obstructing air flow through the air channel (Fig. 3a).

Regarding claim 9, Denoual et al. disclose the door of claim 1, wherein the second panel has a second end and the hook (3a3) extends along the second end, and wherein the hook (3a3) engages the arcuately shaped recess (3b5) along the end of the first panel.

Regarding claim 10, Denoual et al. disclose a door for use with a vehicle, the vehicle defining a load space and having an access opening communicating between the load space and atmosphere, the door comprising: a first panel (3) having a first face and a lower end (3b); and a second panel (3) having a second face and an upper end (3a), one of the lower end (3b) and the upper end defining a recess (3b5), an other of the lower end and the upper end (3a) having a protrusion (3a3), the protrusion being engageable in the recess (3b5) to pivotably connect (Figs. 3A and 3B) the first panel and the second panel, the second panel being pivotable relative to the first panel between a first orientation (Fig. 3B), in which the second face is substantially perpendicular to the first face, and a second orientation (Fig. 3A), in which the second face is substantially parallel to the first face, the second panel being fixedly connected to the first panel when the second panel is in the second orientation (Fig. 3A) and the second panel being

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removeably connected to the first panel when the second panel is in the first orientation (Figs. 3B and 1A).

Regarding claim 11, Denoual et al. disclose the door of claim 10, wherein the vehicle includes tracks (column 1, lines 6-7) positioned adjacent to the access opening, and wherein the tracks limit movement of the second panel between the first orientation and the second orientation (inherent).

Regarding claim 12, Denoual et al. disclose the door of claim 10, wherein the protrusion is a hook (3a3), and wherein the one of the lower end (3b) and the upper end includes an arm (3b2) and a protuberance (3b3) connected to the arm (3b2), together the end, the arm, and the protuberance defining the recess (3b5).

Regarding claim 15, Denoual et al. disclose the door of claim 10, wherein the recess (3b5) extends along the one of the lower end (3b) and the upper end, and wherein the protrusion (3a3) extends along the other of the lower end and the upper end (3a).

Regarding claims 28-34, the product of a door with a first and second panel which are removably connected to one another in one orientation and fixedly connected to each other in another orientation is disclosed by Denoual et al. (see explanation of claims 2 and 3). The method of connecting the panels and placing them on the track would have been inherent to the door being connected and on the track.

4. Claims 1-3, 5, 10 and 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Graham et al. (US Patent 3,511,301).

Regarding claim 1, Graham et al. disclose a door (Fig. 1) for use with a vehicle (the door of Graham is capable of being used with a vehicle defining a load space), the door (Fig. 1)

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comprising: a first panel (12) having an end (22), the end (22) having an arm and a protuberance connected to the arm (22P), together the end, the arm, and the protuberance defining an arcuately shaped recess (Fig. 5); and a second panel (11) having a hook (21P), the hook being engageable (Fig. 5) in the arcuately shaped recess to pivotably connect the first panel and the second panel, the hook (21P) having an arcuate shape corresponding to the arcuately shaped recess.

Regarding claims 2 and 18, Graham et al. disclose the door of claim 1, wherein the first panel has a first face (16) and the second panel has a second face (16), and wherein the second panel (11) is pivotable relative to the first panel (12) between a first orientation (Fig. 5), in which the second face is substantially perpendicular to the first face (although Fig. 5 does not show the panel completely pivoted so that the second face is perpendicular to the first face, the panels are capable of such orientation), and a second orientation (Fig. 4), in which the second face is substantially parallel to the first face.

Regarding claims 3 and 10, Graham et al. disclose the door of claim 2, wherein the second panel is fixedly connected to the first panel when the second panel is in the second orientation (Fig. 4A) and wherein the second panel is removeably connected to the first panel when the second panel is in the first orientation (when the panels are in the first orientation the hook would be able to fit through the clearance (see below) of the recess (36) and therefore would be removeably connected).

Regarding claim 5, Graham et al. disclose the door of claim 2, wherein one of the first panel (12) and the second panel (11) provides a second protuberance (21R) and an other of the first panel (12) and the second panel (11) defines a second recess (22R), the second protuberance (21R) being engageable (Fig. 4) in the second recess (22R) when the second panel is in the

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second orientation (Fig. 4) to reduce air flow between the first panel and the second panel (column 4, lines 23-27).

Regarding claim 23, Graham et al. disclose a door panel (11-14) comprising an elongated body (11-14) having a first end (22) and a second end (21), the first end (22) having an arm and a protuberance (22P) formed at a distal end of the arm, together the first end, the arm, and the protuberance defining an arcuately shaped recess (22P), the protuberance having a first radius, the second end (21) having a hook (21P), the hook having a second radius, the second radius being greater than the first radius.

Regarding claim 24, Graham et al. disclose the door panel of claim 23, wherein the panel has a first face (16), and wherein the arm and the protuberance (22P) are configured to pivotably engage a second panel having a second face (16), the first panel being pivotable relative to the second panel between a first orientation (Fig. 5), in which the first face is substantially perpendicular to the second face, and a second orientation (Fig. 4), in which the first face is substantially parallel to the second face.

Regarding claim 25, Graham et al. disclose the door panel of claim 24, wherein the first panel is removably connectable with the second panel when the first panel is in the first orientation (see explanation of claim 3).

Regarding claim 26, Graham et al. disclose the door panel of claim 24, wherein the second panel is non-removably connectable with the second panel when the first panel is in the second orientation (Fig. 4).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Graham et al.

Graham et al. disclose that the second protrusion is on the second panel and the second recess is on the first panel. It would have been obvious to one of ordinary skill in the art at the time of the invention to place the second protrusion and the second recess on either one of the panels as "the novel triple seal" would still be formed.

8. Claims 16, 18, 21, 27 as understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Graham et al. in view of Teigen et al. (US Patent 5,154,468)

Graham et al. disclose the door panel of claim 23. Regarding claim 16, Graham et al. disclose a door (Fig. 1) for use with a vehicle (the door of Graham is capable of being used with a vehicle defining a load space), the door (Fig. 1) comprising: a first panel (12) having an end

(22), the end (22) having an arm and a protuberance connected to the arm (22P), together the end, the arm, and the protuberance defining an arcuately shaped recess (Fig. 5); and a second panel (11) having a hook (21P), the hook being engageable (Fig. 5) in the arcuately shaped recess to pivotably connect the first panel and the second panel, the hook (21P) having an arcuate shape corresponding to the arcuately shaped recess. Regarding claim 18, Graham et al. disclose the door wherein the first panel has a first face (16) and the second panel has a second face (16), and wherein the second panel (11) is pivotable relative to the first panel (12) between a first orientation (Fig. 5), in which the second face is substantially perpendicular to the first face (although Fig. 5 does not show the panel completely pivoted so that the second face is perpendicular to the first face, the panels are capable of such orientation), and a second orientation (Fig. 4), in which the second face is substantially parallel to the first face. Regarding claim 21, Graham et al. disclose the door wherein one of the first panel and the second panel provides a protuberance (21R) and an other of the first panel and the second panel defines a second recess (22R), the protuberance (21R) being engageable in the second recess (22R) when the second panel (11) is in the second orientation to reduce air flow between the first panel and the second panel.

Graham et al. do not disclose that the panel is formed from a thermally nonconductive material and to make the body and the arm and hook integral of the same thermally nonconductive material.

Teigen et al. disclose a articulated door panel which is made from a thermally nonconductive material (column 5, lines 43-55) and in which the body and the hook are made from the same thermally nonconductive material.

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Graham et al. and Teigen et al. are analogous art because they are from the same field of endeavor, i.e., sectional doors with pivotally connected panels.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to make the panel of a thermally nonconductive material and to make the body and the arm and hook integral.

The motivation would have been to have a lightweight, resilient, self lubricating, wear resistant and corrosion resistant door in one step.

Therefore, it would have been obvious to combine Teigen et al. with Graham to obtain the invention as specified in claims 16, 18, 21 and 27.

9. Claims 7, 8, 13 and 16-20 and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Denoual et al in view of Teigen et al.

Denoual et al. disclose the door of claims 1 and 10. Regarding claim 16, Denoual et al. disclose a door for use with a vehicle, the vehicle defining a load space and having an access opening communicating between the load space and atmosphere, the door comprising: a first panel (3) having an end defining an arcuately shaped recess (3b5); and a second panel (3) having a hook (3a3), the hook being engageable in the arcuately shaped recess (3b5) to pivotably connect the first panel and the second panel (Fig. 3A and 3B). Regarding claim 17, Denoual et al. disclose the door wherein the end includes an arm (3a2) and a protuberance (3a3) connected to the arm, together the end, the arm, and the protuberance defining the arcuately shaped recess (3b5). Regarding claim 18, Denoual et al. disclose the door wherein the first panel (3) has a first face and the second panel (3) has a second face, and wherein the second panel (3) is pivotable relative to the first panel between a first orientation (Fig. 3B), in which the second face is

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substantially perpendicular to the first face, and a second orientation, in which the second face is substantially parallel to the first face (Fig. 3A). Regarding claim 19, Denoual et al. disclose the door wherein the second panel (3) is fixedly connected to the first panel when the second panel is in the second orientation (Fig. 3A) and wherein the second panel is removeably connected to the first panel when the second panel is in the first orientation (Fig. 3b and Fig. 1A). Regarding claim 20, Denoual et al. disclose the door, wherein the vehicle includes tracks (column 1, lines 6-7) positioned adjacent to the access opening, and wherein the tracks limit movement of the second panel between the first orientation and the second orientation (inherent). Regarding claim 22, Denoual et al. disclose the door wherein the second panel has a second end (3a) and the hook (3a3) extends along the second end, and wherein the arcuately shaped recess (3b5) extends along the end of the first panel (3b).

Denoual et al. do not disclose that the first panel and the arm are integrally formed from a thermally nonconductive material or that the second panel and the hook are integrally formed from a thermally nonconductive material. Denoual et al. do disclose that the panel and the arm and the panel and the hook are integrally formed (Figs. 2, 3a and 3b) and made of a plastic material (the cross hatching in Figs. 3A and 3B are the cross hatching for plastic).

Teigen et al. disclose that the panels are made of a thermally nonconductive material (column 5, lines 43-55).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to make the panel of a thermally nonconductive material.

The motivation would have been to have a lightweight, resilient, self lubricating, wear resistant and corrosion resistant door in one step.

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Therefore, it would have been obvious to combine Teigen et al. with Denoual et al. to obtain the invention as specified in claims 7, 8, 13, 16-20 and 22.

10. Claims 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schijf (US Patent 4,315,345).

Schijf discloses a door (Fig. 1) having tracks (21) positioned adjacent the door opening wherein the first panel (1- lower panel in Fig. 2) is capable of being inserted on the tracks (via element 2 and 20) and the second panel is capable of being joined to the first panel by placing it in a second orientation (Fig. 5 and 6) and being rotated to a second orientation (Fig. 9). The method of inserting one panel into the track and then joining the second panel to the first panel would have been obvious to one of ordinary skill in the art. The motivation would have been to make connecting the door to the track simple because the large door with all the panels would not have to have been joined all at once making the job of placing the door on the tracks simple enough for one person to do.

Response to Arguments

11. Applicant's arguments with respect to claims 1-4, 6-13, 15-20, 22 and 28-34 have been considered but are moot in view of the new ground(s) of rejection.

12. Applicant's arguments filed December 20, 2004 have been fully considered but they are not persuasive. Regarding the rejection under 102(b) and 103(a) with Graham, the Applicant argues that Graham does not teach the end, the arm and the protuberance defining an arcuately shaped recess. The Examiner is using the Graham reference specifically against the Species shown in Fig. 9. The Graham reference disclose the protuberance, the end and the arm forming as much of a recess as is shown in Fig. 9. Therefore, the Graham reference meets the limitations

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of claim 5 and claim 14 and therefore must meet the limitations of claims 1 and 10. Regarding the arguments to Graham and claim 10, although Graham does not show the two panels in the 90 degree orientation, Fig. 5 shows the second panel being rotated, if rotated to the full 90 degrees then the panel would be removable.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows other doors made of a plurality of panels.

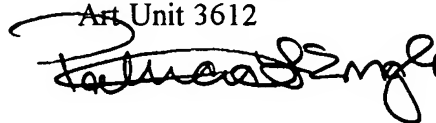
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L Engle whose telephone number is (703) 306-5777.

The examiner can normally be reached on Monday - Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Glenn Dayoan can be reached on (703) 308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L Engle
Primary Examiner
Art Unit 3612



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January 25, 2005